Work Products

Product 1

Description

Product 1a (first element of Task 1 on Water Quality Analysis). EPA technical experts will review any data generated by the Cooperator regarding National Primary Drinking Water (NPDW) standard contaminants. EPA's experts will review data including finished water quality and the methods used to generate data for NPDW contaminants to assess the quality of the results. No testing by EPA necessary; technical review of

Timeline

Internal report delivered 3-4 weeks from the completion of the non-disclosure agreement and transfer of test data from the cooperator.

Use

General assessment of the acceptability of the water for drinking water under nominal operating conditions. Most useful for addressing suitability of the technology for shorter term applications (e.g., emergency response), depending on the scope of testing data provided.

Product 2

Description

Product 1b (second element of Task 1b Water Quality Analysis). Assessment of the growth of potentially harmful bacteria (e.g., *Legionella, Mycobacteria*) during longer term operation of AWGs, particularly intermittently and with storage of the water. Results dependent on testing of collaborator's technology performed by EPA-ORD.

Timeline

Internal report 4 months after completion of MTA and transfer of the equipment to EPA-ORD for testing. The expectations is for a peer-reviewed science report, including testing results from other AWGs, to be submitted within a year from initiation of testing.

Use

Define best management practices/guidance to minimize microbiologically related health risks associated with longer term use of AWGs. Assessment of chemical exposures from long term use of AWGs, particularly as a function of different sources of volatile compounds in source air, would require separate effort.

Product 3

Description

Product 2 (sole element of Task 2: Life Cycle Assessment of AWGs). Assessment of the life cycle costs of using AWG for producing drinking water compared to other approaches (e.g., bottled water) for scenarios of interest. Work does not require of the equipment by EPA, but rather transfer of verifiable data on the capital investment (manufacturing, installation) and operational (energy, chemicals, labor, maintenance) to EPA buy the vendor.

Timeline

Internal report 4 months after completion of NDA and transfer of the data to EPA-ORD. Work also requires definition of the EPA relevant alternative approaches for providing drinking water and scenarios of interest, including the scale and duration. The expectations is for a peer-reviewed science report,

including testing results from other AWGs, to be submitted within a year from initiation of testing.

Use

Define the cost/benefits of AWGs vs other technologies to inform decision makers on selection of solutions for providing drinking water.